ABSTRACT

It is an object of the invention to provide a droplet ejection apparatus that can carry out appropriate recovery processing easily and surely in the case where a main power supply of the apparatus is cut off and then the main power supply is powered on again. The droplet ejection apparatus of the invention has a driving circuit and a plurality of droplet ejection heads. Each of the droplet ejection heads includes a cavity filled with a liquid, a nozzle communicated with the cavity, an actuator driven by the driving circuit, and a diaphragm displaced by the actuator, and ejects the liquid within the cavity through the nozzle in the form of droplets by driving the actuator with the driving circuit. The droplet ejection apparatus further includes power cutoff detecting means 28, a main power supply, a standby power supply 26, residual vibration detecting means, and storage means. The droplet ejection apparatus is constructed so that, when the cutoff of the main power supply is detected by the power cutoff detecting means 28, the actuator is driven by the driving circuit, the residual vibration detecting means detects the residual vibration of the diaphragm displaced by the driving of the actuator, and the storage means stores a vibration pattern of the residual vibration of the diaphragm detected by the residual vibration detecting means and/or information obtained from the vibration pattern.